REMARKS

Claims in the Application.

Claims 1-19 are pending in the present application. Claims 1, 6, 14, and 19 have been amended. Claims 1-19 have been rejected. Claims 6, 14, and 19 have been objected to. Claims 8-9, 11, and 13-15 have been rejected under 35 U.S.C. § 102. Claims 1-7, 10, 12, and 16-19 have been rejected under 35 U.S.C. § 103(a). In light of the amendment and following remarks, Applicants respectfully submit that the active claims of this application are in a condition for Allowance and Notice to that effect is earnestly solicited.

Objection to the Claims.

Claims 6, 14, and 19 have been objected to as being in improper dependent form. Each claim has been amended to clarify that a plurality of Young's moduluses are being determined for a plurality of corresponding specimens. Reconsideration is respectfully requested.

Rejection of Claims 8, 9, 11, and 13-15 under 35 U.S.C. § 102.

The Examiner has rejected Claims 8, 9, 11, and 13-15 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 3,742,757 ("*Callahan*"). To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention either explicitly or inherently. *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). For the following reasons, reconsideration is respectfully requested.

Callahan does not disclose a tester capable of determining Young's modulus. Moreover, the disclosure of *Callahan* focuses on *compressing* the cell axially. *See, e.g., Callahan*, Col. 2,

ll. 65-66. The present invention as claimed requires a *pulled* portion of the mold body and a follower attached to the *pulled* portion of the mold body capable of *imparting axial stress and axial strain on the specimen. See, e.g.*, Claim 8. *Callahan* does not disclose a ram capable of producing a load at a predetermined rate that is transferred to the *follower*. Instead, *Callahan* discloses pneumatic ram 29 that compresses the cell axially. *Callahan* fails to disclose any pulling of the cell. Finally, gages 51 noted by the Examiner fail disclose any measurement of stress. *Callahan* only states that "The full bridge arrangement allows measurement of *bending strains* in the beam independent of thermal and axial strains." *See* Col. 2, ll. 52-54 (emphasis added). For these reasons, *Callahan* does not anticipate Claim 8 or the claims that depend from it and reconsideration is respectfully requested.

Rejection of Claims 1-7 and 16-19 under 35 U.S.C. § 103(a).

The Examiner has rejected Claim 13-24 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,112,599 ("*Maki*") in view of U.S. Patent No. 5,741,971 ("*Lacy*"). When considering an obviousness rejection, a prior art reference may be considered to teach away when "a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

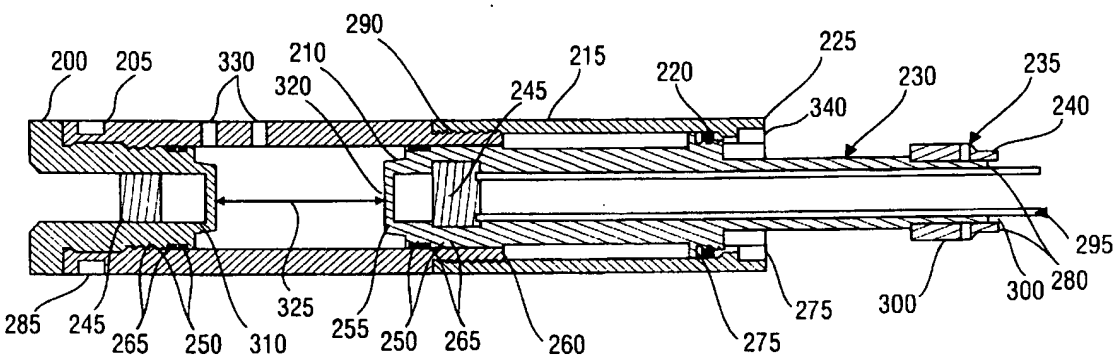
Maki teaches away from the present invention. The Examiner notes that *Maki* teaches:

> When the cover 13 is secured, as illustrated in FIG. 1, the holder 26 positions the lower end of the transducer 25 in the slurry sample S, which displaces the sample within the chamber 14 to a level L-2. This placement of the base of the transducer below the surface of the cement sample S ensures that the transducer is coupled with the cement material, below the level of any fluid overlying the slurry. The transducer holder 26 also penetrates the sample in a frustoconical form that assists

in permitting separation of the holder from a cured cement sample after the testing has been completed.

Col. 7, ll. 57-67. *Maki* does not teach applying a measured axial stress and axial strain tension to the specimen as required by Claim 1 and 16, and the dependent claims thereto. *Maki*'s cited section only teaches the *pressing* of the transducer 25 to the slurry sample S to make a solid contact for measurement. This is not a method of applying measured axial stress and axial strain tension to the specimen. Instead, *Maki* teaches a *compression* of the transducer to the slurry sample S from a Level L-1 to a Level L-2. Claim 16 and its dependencies specifically note "wherein Step (a) does *not* include determining axial stress by compressing the specimen." *See* Claim 16 (emphasis added). The Examiner concedes that *Maki* fails to teach determining a ratio of axial stress to axial strain in the specimen wherein the ratio is the Young's modulus of the specimen as required by these claims.

The Examiner's citation of *Lacy* to cure these deficiencies is improper. The chamber shown in FIG. 2 of Lacy teaches a location to *compress* the sample. As shown,



the interior of the autoclave 325 provides a location for a sample to be *compressed*. *See* Col, 3, ll. 39-41. As was the failing of *Maki*, the teaching of *Lacy* cannot provide any action other than compression via adjustable wall 320. *Lacy* confirms this teaching by noting that *compressive*

strength can be measured. *See id.* at ll. 58. As was the failing of *Maki*, *Lacy* cannot teach the *tension*, and relies solely on *compression*. Claim 1 and its dependencies specifically require tension. Claim 16 and its dependencies specially note that compression cannot be used. For these reasons, *Maki* and *Lacy* teach away from the present invention by relying compression of the sample. Moreover, from the claimed invention is not taught by the combination of the "compression teaching" of these references. Therefore, reconsideration is respectfully requested.

Rejection of Claims 10 and 12 under 35 U.S.C. § 103(a).

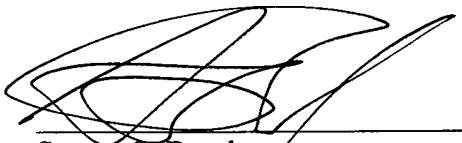
The Examiner has rejected Claims 10 and 12 under 35 U.S.C. § 103(a) as being unpatentable over *Callahan* in view of U.S. Patent No. 3,577,610 ("*Auberndale*") and *Maki*. As previously discussed, *Callahan* teaches *compressing* the cell axially. *See, e.g.*, *Callahan*, Col. 2, ll. 65-66. *Maki* teaches the *pressing* of the transducer 25 to the slurry sample S.

Auberndale also teaches away from the provision of tension or pulling on the sample. *Auberndale* uses a piston 422 that extends into a chamber that includes the mold and applies compression to the mold. *See* Col. 10, ll. 34-36. Claims 10 and 12 require a *pulled* portion of the mold body and a follower attached to the *pulled* portion of the mold body capable of *imparting axial stress and axial strain on the specimen*. *See, e.g.*, Claim 8 (limiting Claims 10 and 12). Because *Auberndale* also fails to apply tension to the sample, it is also inappropriate to teach the invention as claimed. Reconsideration is respectfully requested.

CONCLUSION

For the stated reasons, reconsideration is respectfully requested. The Commissioner is hereby authorized to charge or credit the Deposit Account No. 12-1322 of Locke Liddell & Sapp LLP under Order No. 020569-02100. In light of the foregoing remarks, the claims of the application have been distinguished over the cited references. The Examiner is requested to contact the undersigned at (713) 226-1218 should he deem it necessary to advance the prosecution of this application.

Respectfully submitted,



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